

Amendments to the Claims:

The text of all pending claims (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1. (currently amended) An application server that retrieves data from a database management system using a retrieval request, ~~which includes a retrieval condition;~~ received from a terminal and transmits the data retrieved as a retrieval result to the terminal, comprising:
a cache memory that stores in a correlated form the retrieval condition and the retrieval result;

an update condition setting unit that sets a cache update condition based on a database update condition that indicates when the cache memory is to be updated, ~~wherein the database update condition includes a number of data records updated in the database within a predetermined period; and;~~

an update processing unit that ~~reads the~~ determines whether to transmit a retrieval condition from the cache memory upon fulfillment of request based on the cache update condition, retrieves data as the retrieval result from the database using the retrieval condition, and updates the retrieval result in the cache memory corresponding to the retrieval condition, and

a main controlling unit that sends, to the database management system, the retrieval condition that is produced based on the retrieval request received from the update processing unit and receives the retrieval result of a database from the database management system and stores the retrieval condition and the retrieval result in the correlated form in the cache memory,
wherein

the update condition setting unit sets the cache update condition by acquiring data updated within a predetermined period from the database, and determining whether the number of data records is in a fixed range, and if the number of data records updated is not in the fixed range, the update condition setting unit sets the cache update condition such that the number of ~~data~~ data records updated fall in the fixed range.

2. (canceled)

3. (original) The application server according to claim 1, wherein, when searching the database, the update processing unit acquires a database update condition that indicates when the database is updated and the update condition setting unit sets the cache update condition based on the database update condition acquired.

4. (original) The application server according to claim 1, wherein a user sets the cache update condition.

5. (original) The application server according to claim 1, wherein the update processing unit sets next and subsequent cache update conditions using a date and a time of the retrieval result updated.

6-10. (cancelled)

11. (currently amended) An application server system comprising:
a plurality of application servers, each of which retrieves data from a database management system using a retrieval request, which includes a retrieval condition, received from a terminal and transmits the data retrieved as a retrieval result to the terminal, each application server including

a cache memory that stores in a correlated form the retrieval condition and the retrieval result;

an update condition setting unit that sets a cache update condition based on a database update condition that indicates when the cache memory is to be updated, wherein the database update condition includes a number of data records updated in the database within a predetermined period; and;

an update processing unit that reads the determines whether to transmit a retrieval condition from the cache memory upon fulfillment of request based on the cache update condition, retrieves data as the retrieval result from the database using the retrieval condition; and updates the retrieval result in the cache memory corresponding to the retrieval condition, wherein

a main controlling unit that sends, to the database management system, the retrieval condition that is produced based on the retrieval request received from the update processing unit and receives the retrieval result of a database from the database management system and

stores the retrieval condition and the retrieval result in the correlated form in the cache memory, wherein

the update condition setting unit sets the cache update condition by acquiring data updated within a predetermined period from the database, and determining whether the number of data records is in a fixed range, and if the number of data records updated is not in the fixed range, the update condition setting unit sets the cache update condition such that the number of data records updated fall in the fixed range.

12. (original) The application server system according to claim 11, wherein the cache update condition of each application server differs from the cache update condition of any other application server.

13. (original) The application server system according to claim 11, wherein the cache update condition of all the application servers is identical.

14. (currently amended) A cache update method comprising:
storing a retrieval request-condition received from a terminal ~~that includes a retrieval condition~~ and a retrieval result retrieved using the retrieval request in a correlated form in a cache memory;
reading the retrieval result from the cache memory when a retrieval request is identical to the stored retrieval request;
setting a cache update condition based on a database update condition that indicates when the cache memory is to be updated;
~~reading the determining whether to transmit a retrieval condition from the cache memory upon fulfillment of request based on the cache update condition;~~
~~retrieving data as sending, to the database management system, the retrieval condition that is produced based on the retrieval request received at the determining;~~
~~receiving the retrieval result of a database from the database using management system;~~
and
storing the retrieval condition; and
updating the retrieval result in the cache memory corresponding to the retrieval condition correlated form in the cache memory, wherein
the setting includes setting the cache update condition by acquiring data updated within a predetermined period from the database, and determining whether a number of data

records updated within the predetermined period is in a fixed range, and if the number of data records updated is not in the fixed range, the setting includes setting the cache update condition such that the number of date records updated fall in the fixed range.

15. (new) An application server comprising:

a cache memory that stores therein in a correlated form a retrieval expression and a retrieval result; and

a main controlling unit that sends, to a database management system, the retrieval expression that is produced based on a retrieval condition received from a client terminal or read from the cache memory at a given interval, receives the retrieval result of a database by the retrieval expression from the database management system, and stores the retrieval expression and the retrieval result in the correlated form in the cache memory.

16. (new) A cache control method comprising:

storing a retrieval expression and a retrieval result in a correlated form in a cache memory; and

sending, to a database management system, the retrieval expression that is produced based on a retrieval condition received from a client terminal or read from the cache memory at a given interval;

receiving the retrieval result of a database by the retrieval expression from the database management system; and

storing the retrieval expression and the retrieval result in the correlated form in the cache memory.